

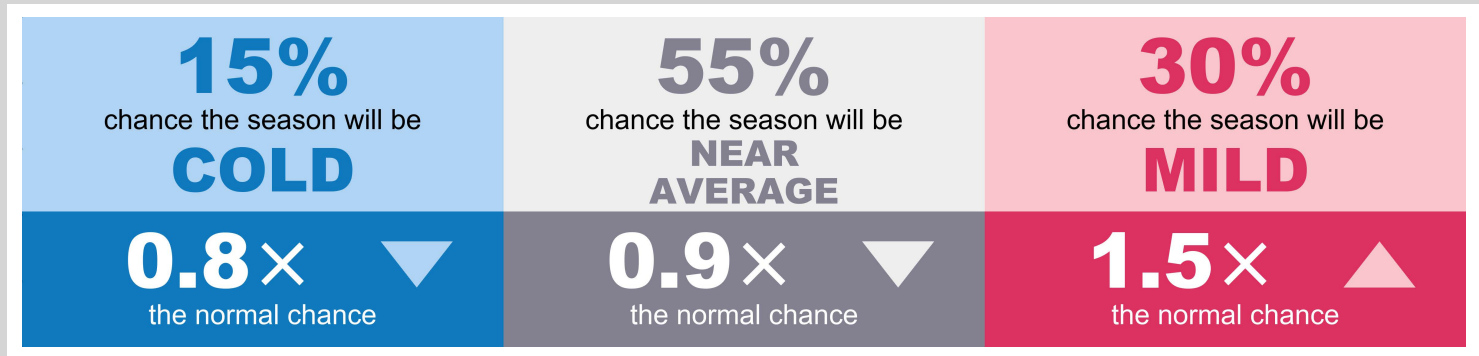
3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

3-month summary

- For the winter as a whole, mild conditions are a little more likely than cold conditions
- Greatest chance of impacts from cold weather are in late winter
- There is a slightly increased chance of wet conditions and impacts from heavy rainfall, especially in early winter
- Stormy conditions, and impacts from high winds, are a little more likely than normal, especially in early winter

3-month likelihood of impact

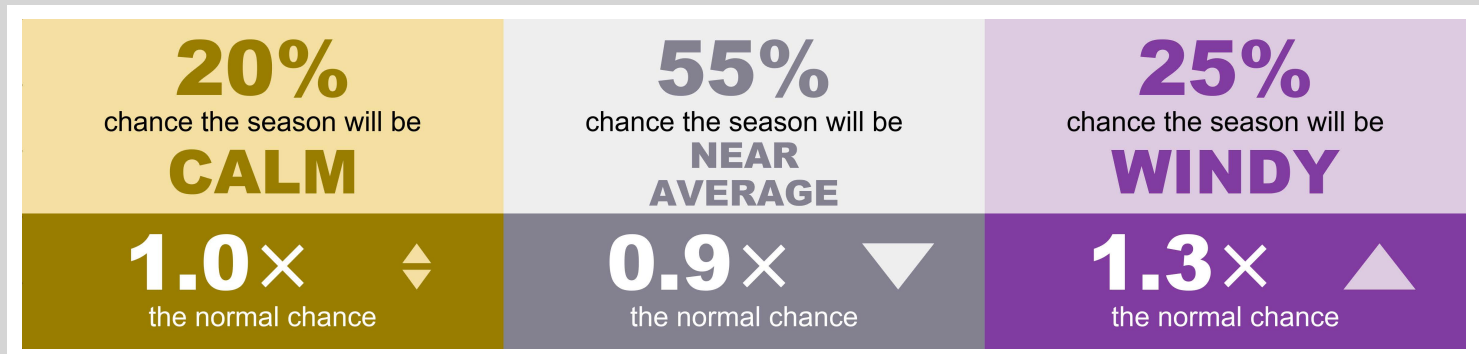
Temperature



Precipitation



Wind speed



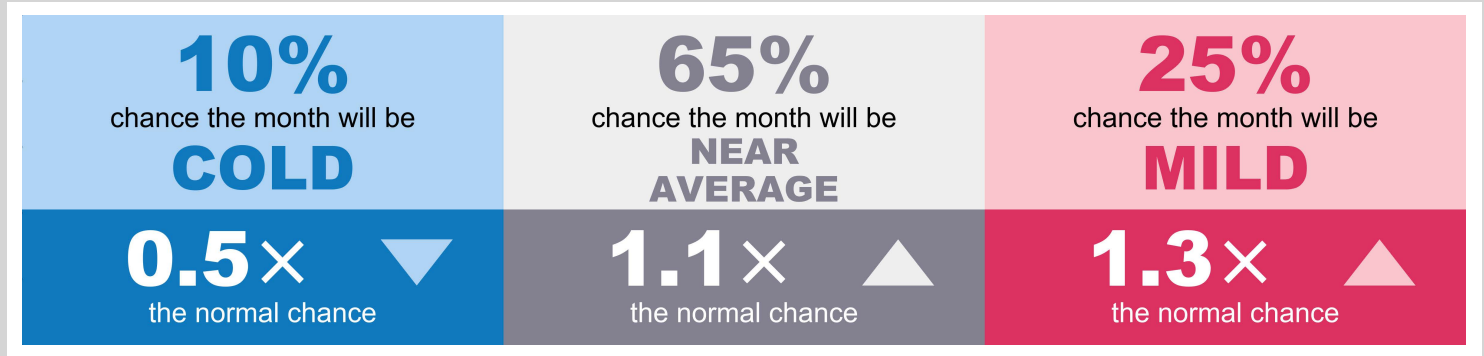
3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

1-month summary

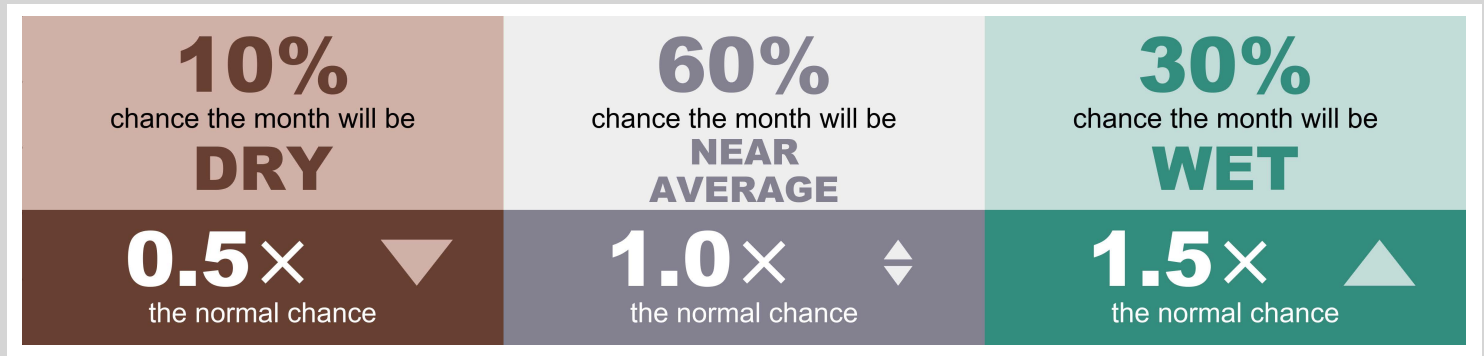
- Despite the chance of a cold start, a near normal December is most likely overall.
- A cold month remains possible, although is less likely than normal.
- An “average” December often sees some settled and/or colder spells, so some cold weather impacts such as frost, snow and ice remain likely.
- There is an increased likelihood of impacts from heavy rain and strong winds.

1-month likelihood of impact

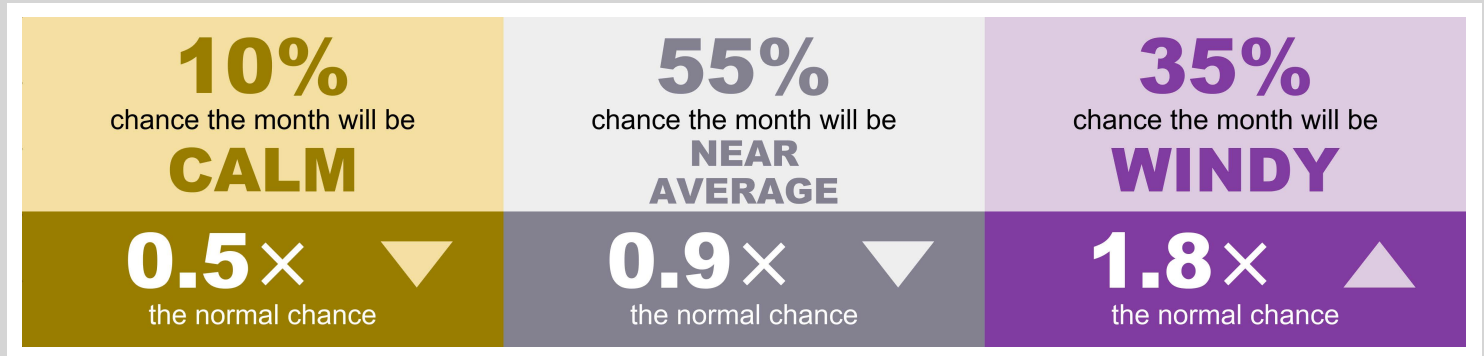
Temperature



Precipitation



Wind speed



3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

Understanding the Outlook

The Outlook uses 3 categories for possible UK temperature, precipitation and wind speed in the next 1 and 3 months:

COLD, NEAR AVERAGE and MILD for temperature
WET, NEAR AVERAGE and DRY for precipitation
CALM, NEAR AVERAGE and WINDY for wind speed

These are linked to observed UK conditions in past years. The NEAR AVERAGE category represents typical conditions for the period and has a normal likelihood of 60%. The higher and lower categories represent more unusual conditions that are more likely to produce impacts. Each has a normal likelihood of 20%.

The Outlook shows how the chances of occurrence of the categories differ from normal, based on knowledge of expected global meteorological patterns. It does not identify which category will actually occur.

Same 3-month period over the last 10 years

2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
MILD	NEAR AVERAGE	MILD	NEAR AVERAGE	NEAR AVERAGE	MILD	MILD	NEAR AVERAGE	MILD	NEAR AVERAGE
WET	NEAR AVERAGE	WET	DRY	NEAR AVERAGE	DRY	WET	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE
WINDY	NEAR AVERAGE	WINDY	NEAR AVERAGE	NEAR AVERAGE	CALM	WINDY	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE

Same 1-month period over the last 10 years

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
MILD	NEAR AVERAGE	MILD	MILD	NEAR AVERAGE	MILD	NEAR AVERAGE	NEAR AVERAGE	MILD	COLD
WET	NEAR AVERAGE	WET	DRY	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE
WINDY	NEAR AVERAGE	WINDY	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE

Outlook in context

Drivers of UK weather for December to February

Global weather patterns can affect UK weather during the coming season and their influence acts to shift the chances of the categories in the Outlook.

- Drivers relevant to the current Outlook include:
- The warming of UK climate consistent with wider global warming trends
 - A strong El Niño event, which increases the likelihood of mild, wet and windy weather in early winter, and drier, colder conditions later.
 - The easterly phase of the QBO, favours a reduction in the strength of the westerly winds over the UK.
 - A strong positive phase of the IOD which increases the chances of southwesterly winds in winter.
 - SSTs to the west of the UK are near average, which is lower than some recent years, and the pattern of sea surface temperatures in the North Atlantic Ocean sometimes favours a reduction in westerly winds.

Long-range weather predictions

The Met Office and other prediction centres around the world routinely produce long-range forecasts of conditions in the months ahead. There is reasonable confidence for lower-than-normal pressure to the north of the UK and higher to the south during the winter. This pattern often brings mild, wet, and windy spells from the Atlantic. Later in the season, many prediction systems (though not all) suggest that the high pressure, may start to become more dominant, with an increased chance later in the season of more settled conditions developing at times. This is no guarantee of unusually cold conditions but does increase the chance compared to earlier in the winter.

Impact

With spells of wet and windy weather likely to dominate, especially early on, impacts from rain and wind are likely to continue, especially given the wet autumn. Impacts from cold weather related hazards, such as snow and ice, are more likely during the late part of winter.

3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

Outlook compared to normal likelihood

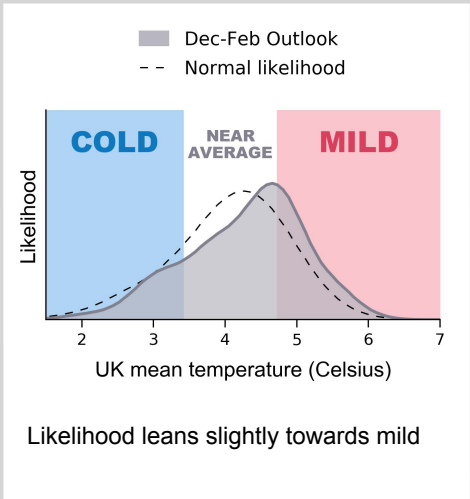
The curves below show the likelihood of the 1- and 3-month average temperature, precipitation and wind speed taking specific values. In each case:

- The dashed curve shows the normal likelihood based on how often each value has been recorded in past years
- The solid curve shows the current likelihood based on the Outlook for this year

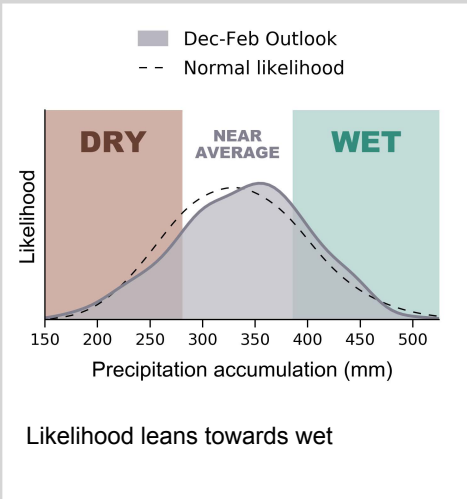
The differences in these curves show how the probabilities for the coming periods differ compared to past years. Where the solid curve (corresponding to this year's Outlook) lies above the dashed curve (normal likelihood), the temperature, precipitation or wind speed at that point has a greater-than-normal likelihood of occurring. Likewise, wherever it is below the dashed curve, the likelihood of those values is less than normal.

A shift of the solid curve to the left of the dashed curve indicates an increase in the chances of below-average temperature, rainfall or winds. A shift to the right, meanwhile, indicates increased chances of above-average values.

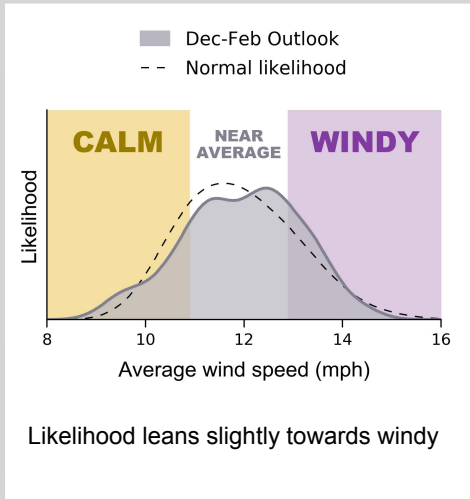
3-month temperature Outlook compared to normal



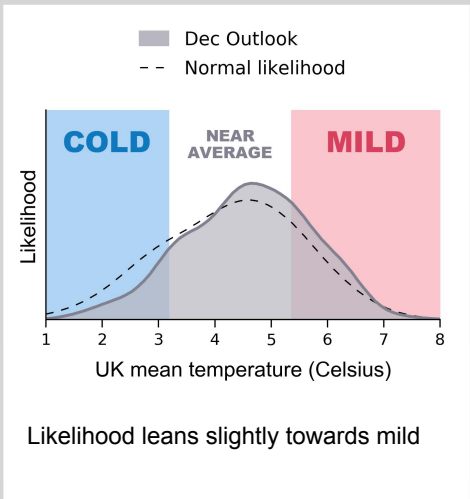
3-month precipitation Outlook compared to normal



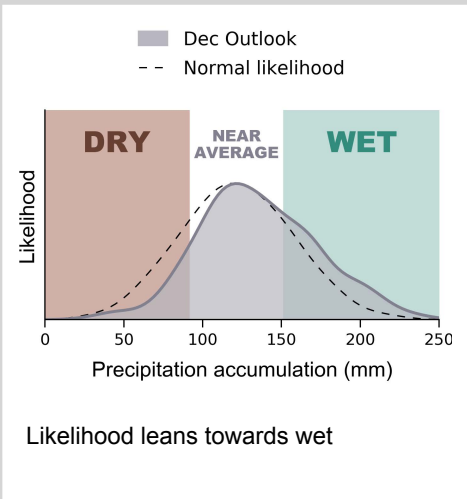
3-month wind speed Outlook compared to normal



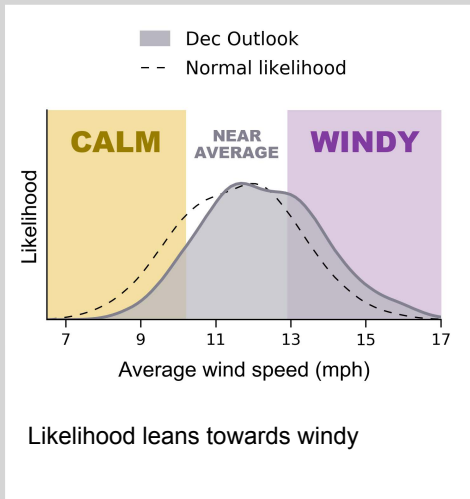
1-month temperature Outlook compared to normal



1-month precipitation Outlook compared to normal



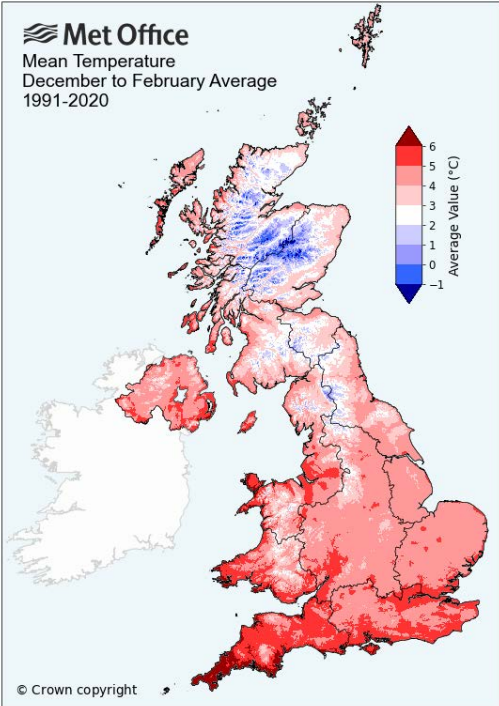
1-month wind speed Outlook compared to normal



3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

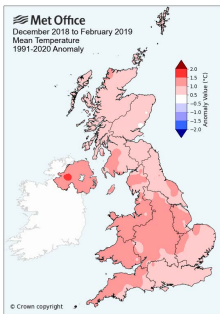
Long-term average temperatures (3-month)

This page shows the long-term average temperatures across the UK applicable to the 3-month Outlook period.

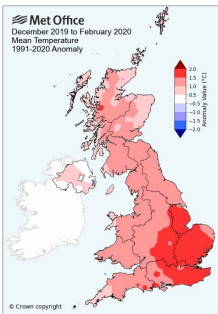


Average temperatures for December - February based on observations of past years.

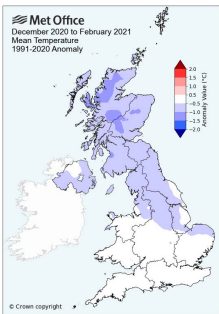
Last 5 years temperatures, difference from average (3-month)



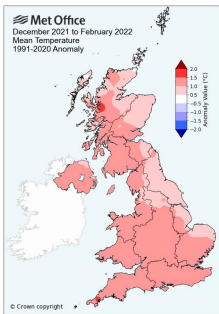
Dec - Feb 2018/19



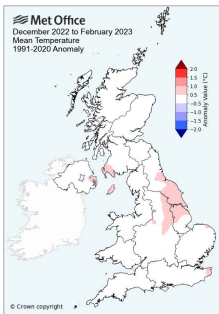
Dec - Feb 2019/20



Dec - Feb 2020/21

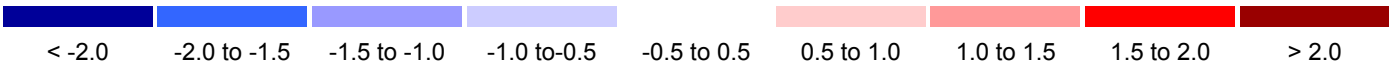


Dec - Feb 2021/22



Dec - Feb 2022/23

Anomaly (°C)

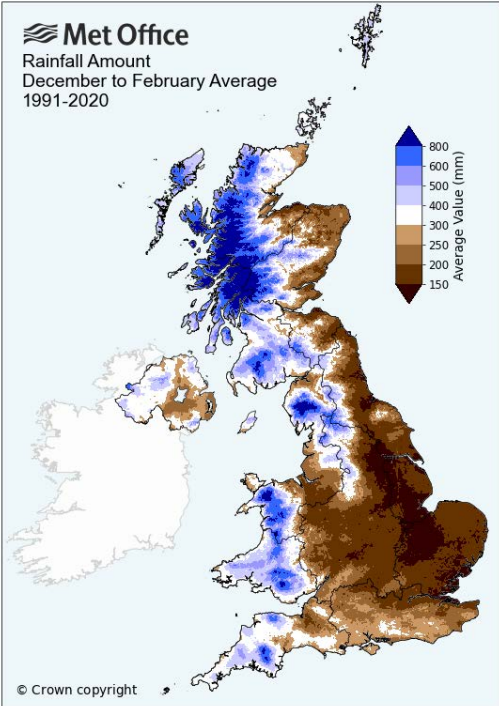


These maps show how December - February temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate milder-than-average conditions while blue shades indicate colder-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

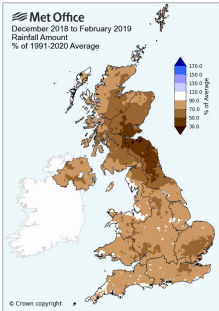
Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK applicable to the 3-month Outlook period.

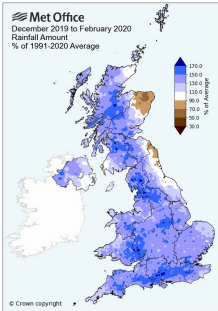


Average precipitation for December - February based on observations of past years.

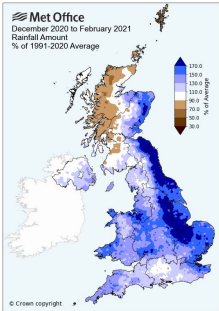
Last 5 years precipitation, difference from average (3-month)



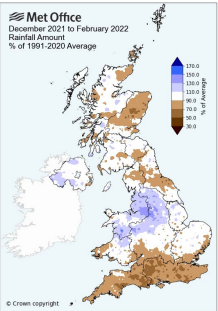
Dec - Feb 2018/19



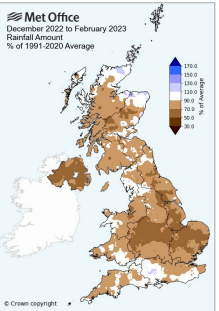
Dec - Feb 2019/20



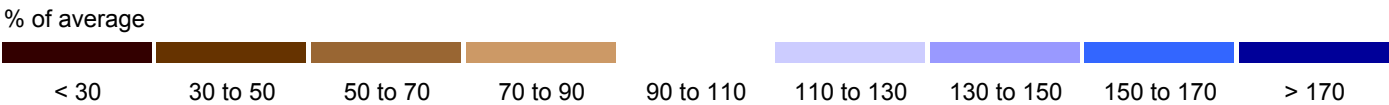
Dec - Feb 2020/21



Dec - Feb 2021/22



Dec - Feb 2022/23

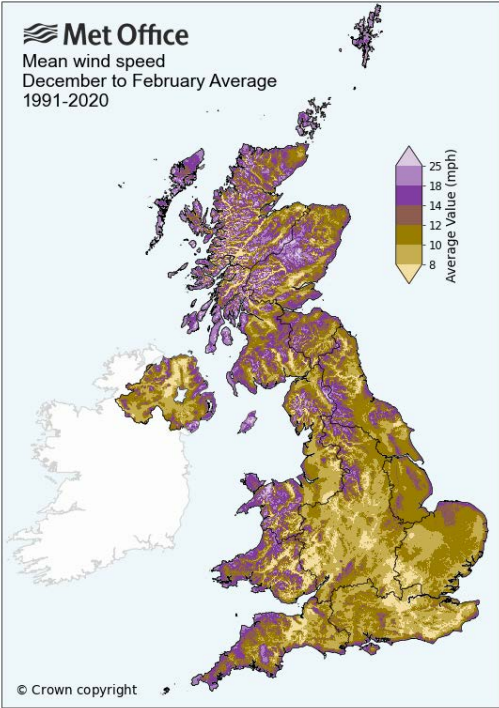


These maps show how December - February precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

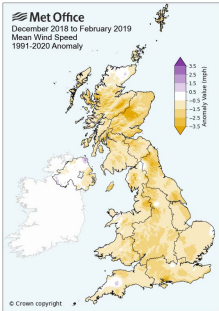
Long-term average wind speed (3-month)

This page shows the long-term average wind speed across the UK applicable to the 3-month Outlook period.

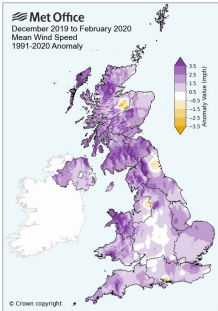


Average wind speed for December - February based on observations of past years.

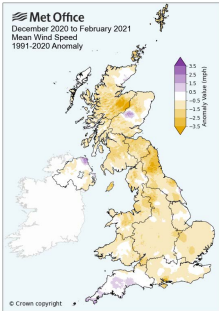
Last 5 years wind speed, difference from average (3-month)



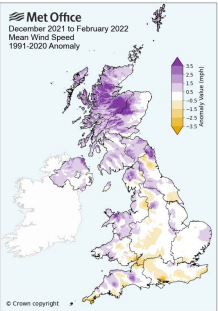
Dec - Feb 2018/19



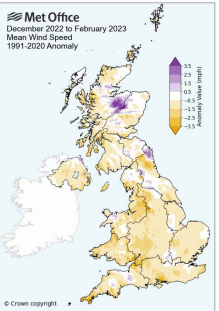
Dec - Feb 2019/20



Dec - Feb 2020/21

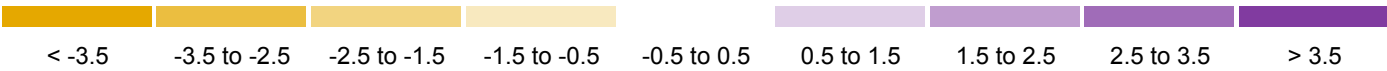


Dec - Feb 2021/22



Dec - Feb 2022/23

Anomaly (mph)

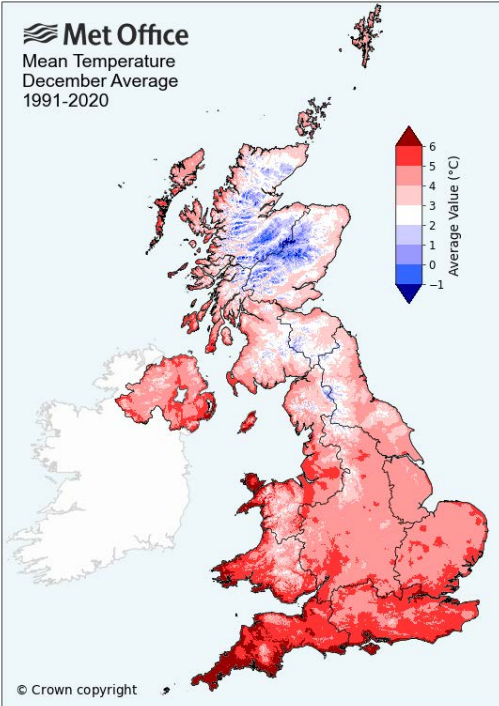


These maps show how December - February wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

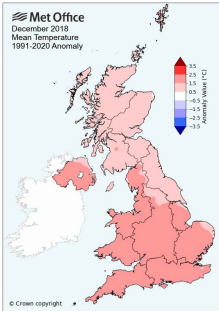
Long-term average temperatures (1-month)

This page shows the long-term average temperatures across the UK applicable to the 1-month Outlook period.

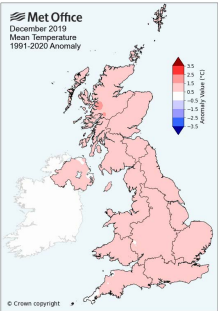


Average temperatures for December based on observations of past years.

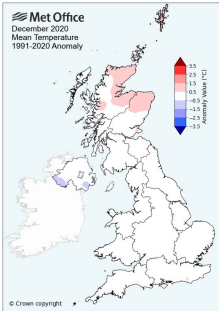
Last 5 years temperatures, difference from average (1-month)



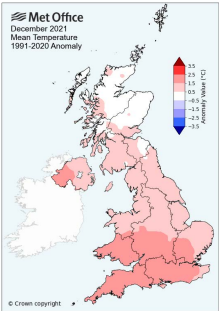
Dec 2018



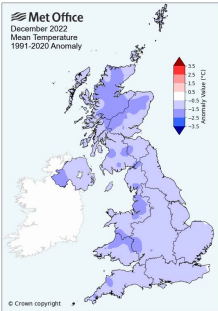
Dec 2019



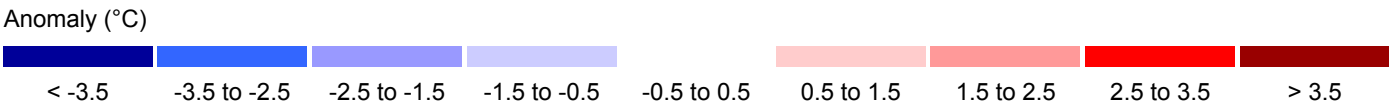
Dec 2020



Dec 2021



Dec 2022

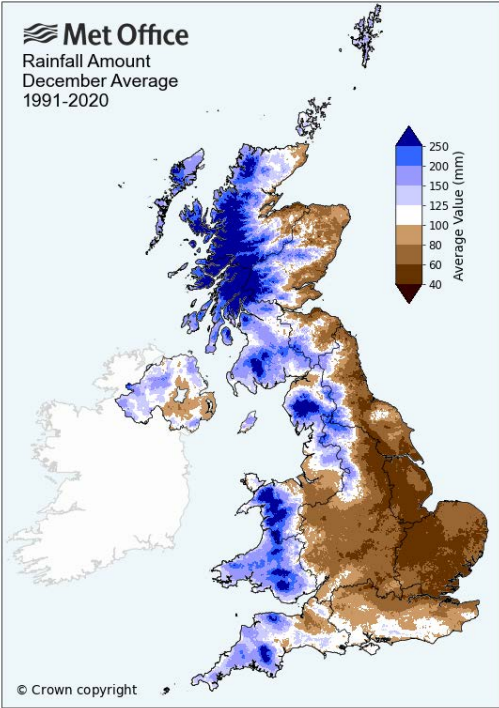


These maps show how December temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate milder-than-average conditions while blue shades indicate colder-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

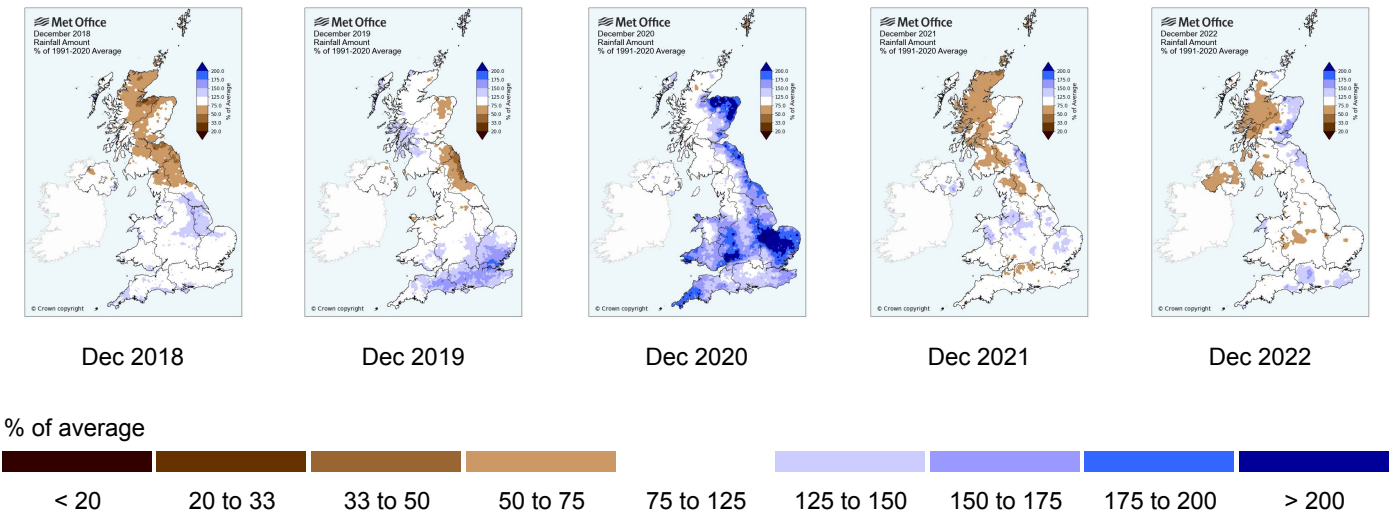
Long-term average precipitation (1-month)

This page shows the long-term average precipitation across the UK applicable to the 1-month Outlook period.



Average precipitation for December based on observations of past years.

Last 5 years precipitation, difference from average (1-month)

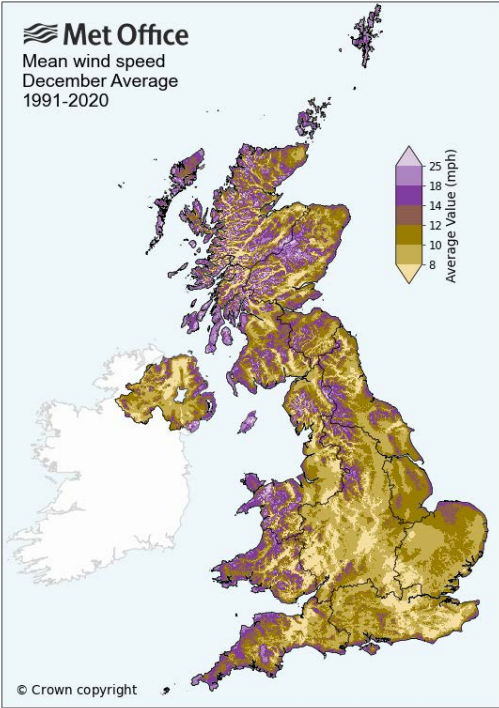


These maps show how December precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

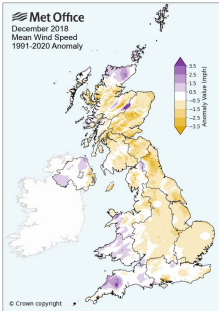
Long-term average wind speed (1-month)

This page shows the long-term average wind speed across the UK applicable to the 1-month Outlook period.

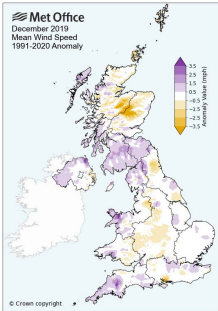


Average wind speed for December based on observations of past years.

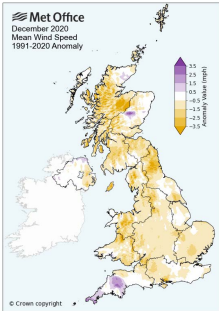
Last 5 years wind speed, difference from average (1-month)



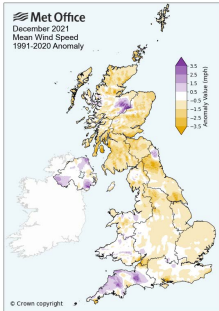
Dec 2018



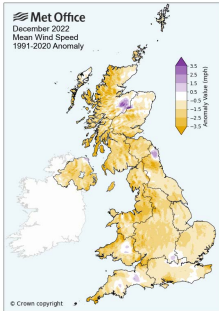
Dec 2019



Dec 2020

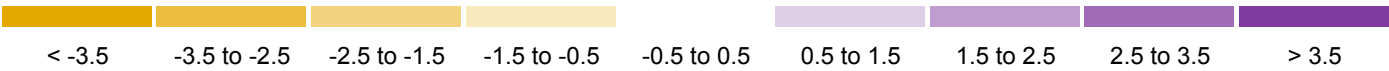


Dec 2021



Dec 2022

Anomaly (mph)



These maps show how December wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	----------------	---------------

Q&As

Q. What is the point of the Outlook, who is it meant for?

A. This Outlook is produced for planners in government and business who make risk-based decisions. These users are aware of the complexities of this type of outlook and will include those factors in their decision-making process.

Q. How did you decide on the Outlook? What are the main factors affecting it?

A. It is based on information from observations, several numerical prediction systems and expert judgement. See the 'Outlook in Context' section of the Outlook for more details.

Q. Is the Outlook for the whole country?

A. The Outlook is for the average of conditions over the UK as a whole. Regional deviations from the UK-average can occur. For example, average UK precipitation can result from below-average rainfall for the northwest and above-average for the southeast.

Q. How confident are you in this Outlook?

A. The percentages in the 'Likelihood of Impact' sections of the Outlook give the level of confidence.

Q. What impact will El Niño have on the weather this winter?

A. El Niño has a moderate influence on the UK's weather and is only one of a number of factors that meteorologists will take into account when assessing the Outlook. Generally speaking, past El Niño events have tended to favour wetter and milder conditions for the UK early in winter with colder and drier conditions later in the season, although the effect is relatively easily disrupted by other factors in any given year.

Q. Does Outlook mean there is an increased chance of storms and flooding?

A. Whilst the Outlook shows an increased likelihood of impacts from wet and windy weather it cannot specify the severity, duration, or timings of specific events such as storms. However, rainfall this autumn has been above average for much of the UK, implying greater potential sensitivity to rainfall in winter. It is therefore important to keep up to date with the latest warnings and forecasts and monitor the risk of flooding in your area by using the warnings on the EA, SEPA, NI Direct and Natural Resources Wales websites.

Q. Does this Outlook mean we will not have snow this winter? What about a white Christmas?

A. The Outlook concerns weather themes over the whole period and cannot tell us whether or not, or indeed when or where we might have snow. Broadly speaking, milder UK winters have less snow, but it is still possible to have cold, snowy periods embedded within winters that are mild overall. Information about the Christmas period can be obtained nearer the time from our shorter-range forecasts on the website <https://www.metoffice.gov.uk/>

3-month	1-month	About the Outlook	Shifts in likelihood	What is average?	Q&A	Find out more
---------	---------	-------------------	----------------------	------------------	-----	---------------

About the Outlook

The Outlook presented here is for United Kingdom as a whole and is based on information from observations, several numerical prediction systems and expert judgement. It is updated monthly to reflect the latest information on global weather patterns and their effect on the UK. The Outlook is designed to be used in conjunction with shorter-range forecasts – detailed weather forecast information is available on the Met Office website.

In this product, temperature refers to the average of daytime maxima and night-time minima. Wind speed refers to the average wind speed at a height of 10 metres. All numerical values relate to averages (temperature, wind speed) or totals (precipitation – rain, sleet, snow and hail) over 1 or 3 months, which are further averaged over the UK land area as a whole. Normal likelihood and long-term averages are established using the period 1991-2020.

Find out more

- UK 3-month Outlook user guidance page:
<https://www.metoffice.gov.uk/services/government/contingency-planners/user-guidance/user-guidance>
- Explaners on climate drivers (such as the El Niño Southern Oscillation and North Atlantic Oscillation) that influence seasonal forecasts and the impacts they can have on UK weather:
<https://www.metoffice.gov.uk/services/government/contingency-planners/seasonal-forecasts-and-climate-drivers-resources>
- Contingency planners page:
<https://www.metoffice.gov.uk/services/government/contingency-planners/index>

Contact us

Website:
www.metoffice.gov.uk

Email:
enquiries@metoffice.gov.uk

Provide your feedback

We would like to hear your feedback on the UK 3-month Outlook to understand how it is being used. Please fill in the short form using this [link](#) or QR code to share your thoughts.

